

Attorney's Docket: 2001D2307/D

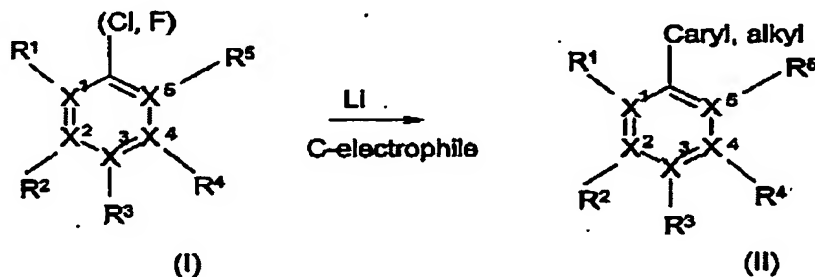
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Art Unit 1625

Response to Restriction Requirement of February 18, 2005

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Previously Presented) A process for preparing compounds of the formula (II),



where the substituents R^1 to R^5 are each independently H, CH_3 , straight-chain or branched C_1 - C_8 -alkyl, $CH(OC_1-C_8-alkyl)_2$, $CH(C_1-C_8-alkyl)(OC_1-C_8-alkyl)$, $CH_2(OC_1-C_8-alkyl)$, $CH(CH_3)(OC_1-C_8-alkyl)$, C_1 - C_8 -alkoxy, $N(C_1-C_8-alkyl)_2$, phenyl, substituted phenyl, aryl, heteroaryl, $S(C_1-C_8-alkyl)$ or a radical $C_{aryl, alkyl}$, and the symbols X^1 to X^6 are each carbon with a maximum of two neighboring X^1 - X^6 are nitrogen or X^1R^1 and X^2R^2 together are O, NH, $N(C_1-C_8-alkyl)$, $N(C=O-C_1-C_8-alkyl)$, $N(SiR_3)_2$ or S,

or where neighboring radicals R^1 to R^5 form the following structural unit,

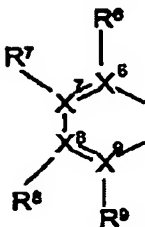
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I.

where X^6 to X^9 and R^6 to R^9 have the same meaning as X^1 to X^5 and R^1 to R^5
and

the radical $C_{aryl, alkyl}$ is straight-chain or branched, substituted or unsubstituted C_1 - C_8 -alkyl, 1-hydroxyalkyl having from 1 to 8 carbon atoms, CN, 2-hydroxyalkyl having from 2 to 5 carbon atoms, 3-hydroxyalkyl having from 3 to 5 carbon atoms, 1-NHR-alkyl having from 1 to 5 carbon atoms, $CH(OC_1-C_6-alkyl)_2$, $C(C_1-C_5-alkyl)(OC_1-C_6-alkyl)$, $CH_2(OC_1-C_6-alkyl)$, $CH(CH_3)(OC_1-C_3-alkyl)$, C_1 - C_6 -alkoxy, $N(C_1-C_6-alkyl)_2$, phenyl, substituted phenyl, aryl, heteroaryl, CO_2H , CO_2alkyl , $(C=O)_{0.5}$, substituted 1-vinylalkyls, $CH_3-C(=O)$, $R-C(=O)$ or CHO ,

which comprises reacting chloro- or fluoroaromatics of the formula (I) with carbon electrophiles and lithium metal.

2. (Currently Amended) The process as claimed in claim 1, wherein the carbon electrophile is selected from the group consisting of:

aryl or alkyl cyanates ($C_{aryl, alkyl} = CN$)

oxirane, substituted oxiranes ($C_{aryl, alkyl} = CH_2CH_2OH$, substituted CR_2CR_2OH)

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azomethines ($C_{\text{aryl,alkyl}} = CR^1_2-NR^1H$)nitroenolates ($C_{\text{aryl,alkyl}} = \text{oximes}$)immonium salts ($C_{\text{aryl,alkyl}} = \text{amines}$)haloaromatics, aryl triflates, other arylsulfonates ($C_{\text{aryl,alkyl}} = \text{aryl, heteroaryl}$)carbon dioxide ($C_{\text{aryl,alkyl}} = \text{COOH}$)carbon monoxide ($C_{\text{aryl,alkyl}} = (-\text{CO}-)_{0.5}$)aldehydes, ketones ($C_{\text{aryl,alkyl}} = \text{CHR}^1\text{-OH, CR}^1_2\text{-OH}$) α,β -unsaturated aldehydes/ketones ($C_{\text{aryl,alkyl}} = \text{CH(OH)-vinyl, CR}^1\text{(OH)-vinyl}$)ketenes ($C_{\text{aryl,alkyl}} = \text{C(=O)CH}_3$ in ketene, C(=O)-R in substituted ketenes)alkali metal and alkaline earth metal salts of carboxylic acids ($C_{\text{aryl,alkyl}} = \text{CHO}$ in formates, COCH_3 in acetates, R^1CO in R^1COOMet)aliphatic nitriles ($C_{\text{aryl,alkyl}} = \text{COCH}_3$ in acetonitrile, R^1CO in R^1CN)aromatic nitriles ($C_{\text{aryl,alkyl}} = \text{COAr}^1$)amides ($C_{\text{aryl,alkyl}} = \text{CHO}$ in HCONR^1_2 , C(=O)R^1 in $\text{R}^1\text{CONR}^1_2$)esters ($C_{\text{aryl,alkyl}} = [\text{C(OH)R}^1]_{0.5}$ • [[or]]alkylating agents ($C_{\text{aryl,alkyl}} = \text{alkyl}$), and mixtures thereof.

3. (original) The process as claimed in claim 1, wherein the reaction is performed at a temperature in the range from -100 to $+80^\circ\text{C}$.
4. (original) The process as claimed in claim 1, wherein lithium is used in the form of a dispersion, powder, turnings, sand, granules, pieces or in the form of bars.

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5. (Currently Amended) The process as claimed in claim 1, wherein the solvent used is an aliphatic or aromatic ether, a hydrocarbon or an amine which does not carry a hydrogen on the nitrogen atom, selected from the group consisting of triethylamine, diethyl ether, tetrahydrofuran, toluene, toluene-THF mixtures, anisole, and diisopropyl ether, and mixtures thereof.
6. (original) The process as claimed in claim 1, wherein the process is performed as a one-pot process.
7. (original) The process as claimed in claim 1, wherein the organolithium compound is first generated and then reacted with the carbon electrophile at the same or a slightly different temperature.
8. (original) The process as claimed in claim 1, where the straight-chain or branched C₁-C₈-alkyl is a C₁-C₇-alkyl and the C₁-C₈-alkoxy is a C₁-C₇-alkoxy.
9. (original) The process as claimed in claim 2, wherein the reaction is performed at a temperature in the range from -100 to +80°C.
10. (original) The process as claimed in claim 2, wherein lithium is used in the form of a dispersion, powder, turnings, sand, granules, pieces or in the form of bars.

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11. (Currently Amended) The process as claimed in claim 2, wherein the solvent used is an aliphatic or aromatic ether, a hydrocarbon or an amine which does not carry a hydrogen on the nitrogen atom, selected from the group consisting of triethylamine, diethyl ether, tetrahydrofuran, toluene, toluene-THF mixtures, anisole, [[and]] diisopropyl ether, and mixtures thereof.
12. (original) The process as claimed in claim 2, wherein the process is performed as a one-pot process.
13. (original) The process as claimed in claim 2, wherein the organolithium compound is first generated and then reacted with the carbon electrophile at the same or a slightly different temperature.
14. (original) The process as claimed in claim 3, wherein lithium is used in the form of a dispersion, powder, turnings, sand, granules, pieces or in the form of bars.
15. (Currently Amended) The process as claimed in claim 3, wherein the solvent used is an aliphatic or aromatic ether, a hydrocarbon or an amine which does not carry a hydrogen on the nitrogen atom, selected from the group consisting of triethylamine, diethyl ether, tetrahydrofuran, toluene, toluene-THF mixtures, anisole, [[and]] diisopropyl ether, and mixtures thereof.

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16. (original) The process as claimed in claim 3, wherein the process is performed as a one-pot process.
17. (original) The process as claimed in claim 3, wherein the organolithium compound is first generated and then reacted with the carbon electrophile at the same or a slightly different temperature.
18. (Currently Amended) The process as claimed in claim 4, wherein the solvent used is an aliphatic or aromatic ether, a hydrocarbon or an amine which does not carry a hydrogen on the nitrogen atom, selected from the group consisting of triethylamine, diethyl ether, tetrahydrofuran, toluene, toluene-THF mixtures, anisole [[and]] diisopropyl ether, and mixtures thereof.
19. (original) The process as claimed in claim 4, wherein the process is performed as a one-pot process.
20. (original) The process as claimed in claim 4, wherein the organolithium compound is first generated and then reacted with the carbon electrophile at the same or a slightly different temperature.

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